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(54) METHOD OF FORMING MULTILAYERED FILM AND MULTILAYERED FILM

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a method of forming a multilayered film, which is capable of providing a 3 coat film having high throwing power even in a 3 coat 1 base coating system using a water paint and providing the 3 coat film having the same film performance such as appearance and corrosion resistance as that obtained by the conventional 3 coat 3 bake coating system.

SOLUTION: In the method of forming the multilayered film by forming an unhardened water based intermediate coating film, water based film and clear film by wet-on-wet system on a hardened cationic delectrodeposition film and after that, hardening by heating at the same time, a lead free cationic electrodeposition having low volatile organic component content(VOC) and low metallic ion concentration is used as the cationic electrodeposition coating material and one prepared by dispersing a film forming resin solution with a nonionic dispersing agent and/or a cationic dispersing agent in water is used as the intermediate coating material.